

CLAIMS

What is claimed is:

1. An assembly comprising: a first, a second and a third component having a first hole, a second hole and a third hole, respectively, the assembly further including a locating member assembled into the first hole, the second hole, and the third hole, the locating member having at least a small diameter cylindrical portion which is concentric relative to a large diameter cylindrical portion to provide a shoulder, the locating member further including a first fixing portion proximate the small diameter portion for securing the second component relative to the assembly and a second fixing portion proximate the large diameter portion for securing the third component relative to the assembly, in which the small diameter cylindrical portion is located in the second hole in order to align the locating member relative to the second component, and the large diameter portion is located in the third hole in order to align the locating member relative to the third component, thereby aligning the second component relative to the third component, in which the first component is situated between the second and third component and also between the shoulder and the second component.
2. The assembly as defined in claim 1 in which at least one of the fixing portions is in the form of a threaded portion.
3. The assembly as defined in claim 2 in which the threaded fixing portion engages the second component.
4. The assembly as defined in claim 2 in which the threaded fixing portion engages the third component
5. The assembly as defined in claim 2 in which the threaded fixing portion engages a nut.

6. The assembly as defined in claim 2 in which the threaded fixing portion is parallel sided.
7. The assembly a defined in claim 2 in which the threaded fixing portion is tapered.
8. The assembly as defined in any claim 1 in which the locating member includes a driving feature.
9. The assembly as defined in claim 1 in which at least one of the fixing portions is in the form of a rivet.
10. The assembly as defined in claim 1 in which the first component locates on the small diameter portion.
11. The assembly as defined in claim 1 in which the second and the third components are aligned relative to each other more accurately than the locating member is aligned relative to the first component.
12. The assembly as defined in claim 1 in which at least one of the second and third holes is a through hole.
13. The assembly as defined in claim 1 in which at least one of the second and third holes is a blind hole.
14. The assembly as defined in claim 1 in which the first component is sealed relative to the second component.
15. The assembly as defined in claim 1 in which the first component is sealed relative to the third component.
16. The assembly as defined in claim 1 in which the first component is a door panel.

17. The assembly as defined in claim 1 in which the second component is part of a window regulator mechanism.
18. An assembly as defined in claim 1 in which the third component is part of a window regulator motor.
19. An assembly as defined in claim 1 in which the first, the second and the third components are fixed relative to each other.
20. An assembly as defined in claim 19 further including a further locating member which, in conjunction with said locating member, fixes the first, the second and the third components relative to each other.

21. A method of assembling an assembly comprising the steps of:

providing a first component having a first hole, a second component having a second hole, and a third component having a third hole;

providing a locating member having at least a small diameter cylindrical portion which is concentric relative to a large diameter cylindrical portion to provide a shoulder and a first fixing portion proximate the small diameter portion and a second fixing portion proximate the large diameter portion;

locating the small diameter cylindrical portion and the large diameter cylindrical portion in the second hole and the third hole, respectively, to align the locating member relative to the second component and the third component, respectively;

aligning the second component relative to the third component, in which the first component is situated between the second and the third component and between the shoulder and the second component; and

securing the second component and the third component relative to the assembly by the first fixing portion and the second fixing portion, respectively.

22. The method of assembling the assembly as defined in claim 21 including the steps of inserting a locating member into one of the second hole and the third hole, inserting the locating member into the first hole, and inserting the locating member into the other of the second hole and third hole to provide the assembly.

23. The method of assembling an assembly as defined in claim 22 including the step of pre-aligning at least two of the holes prior to inserting the locating member.